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Welcome to STN International! Enter x:x
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LOGINID:ssspta1611bxv

PASSWORD:

NEWS IPC8

TERMINAL (ENTER 1, 2, 3, OR ?):2

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* * * * * * * * * * Welcome to STN International
NEWS 1
                   Web Page for STN Seminar Schedule - N. America
NEWS 2 MAR 15 WPIDS/WPIX enhanced with new FRAGHITSTR display format
NEWS 3 MAR 16 CASREACT coverage extended
NEWS 4 MAR 20 MARPAT now updated daily
NEWS 5 MAR 22 LWPI reloaded
NEWS 6 MAR 30 RDISCLOSURE reloaded with enhancements
NEWS 7 APR 02 JICST-EPLUS removed from database clusters and JI.

NEWS 8 APR 30 GENBANK reloaded and enhanced with Genome Project ID field

NEWS 9 APR 30 CHEMCATS enhanced with 1.2 million new records

100 CA/Caplus enhanced with 1870-1889 U.S. patent records
NEWS 11 APR 30 INPADOC replaced by INPADOCDB on STN
NEWS 12 MAY 01 New CAS web site launched
NEWS 13 MAY 08 CA/Caplus Indian patent publication number format defined
NEWS 14 MAY 14 RDISCLOSURE on STN Easy enhanced with new search and display
                   fields
NEWS 15 MAY 21 BIOSIS reloaded and enhanced with archival data
NEWS 16 MAY 21 TOXCENTER enhanced with BIOSIS reload
NEWS 17 MAY 21 CA/Caplus enhanced with additional kind codes for German
                   patents
NEWS 18 MAY 22 CA/Caplus enhanced with IPC reclassification in Japanese
                   patents
NEWS 19
          JUN 27 CA/CAplus enhanced with pre-1967 CAS Registry Numbers
NEWS EXPRESS NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT
                MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
                AND CURRENT DISCOVER FILE IS DATED 25 SEPTEMBER 2006.
NEWS HOURS
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FILE 'HOME' ENTERED AT 13:11:49 ON 27 JUN 2007

=> file reg
COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

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STRUCTURE FILE UPDATES: 26 JUN 2007 HIGHEST RN 939408-72-7 DICTIONARY FILE UPDATES: 26 JUN 2007 HIGHEST RN 939408-72-7

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TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

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http://www.cas.org/support/stngen/stndoc/properties.html

=>

Uploading C:\Program Files\Stnexp\Queries\10531361.str

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chain nodes :
15  16  17  18  19  23
ring nodes :
1  2  3  4  5  6  7  8  9  10  11  12  13  14
chain bonds :
9-15  12-16  16-17  16-18  18-23
ring bonds :
1-2  1-6  2-3  3-4  4-5  5-6  5-7  6-9  7-8  7-10  7-14  8-9  10-11  11-12  12-13
13-14
exact/norm bonds :
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12-13  12-16  13-14  16-17  16-18  18-23
isolated ring systems :
containing 1 :
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G1:H,[\*1]

G2:C,N

Connectivity:

19:1 E exact RC ring/chain

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:CLASS 16:CLASS 17:CLASS 18:CLASS

19:CLASS 23:CLASS

L1 STRUCTURE UPLOADED

=> d 11

L1 HAS NO ANSWERS

L1 STR

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

Structure attributes must be viewed using STN Express query preparation.

=> s 11 sss sam

SAMPLE SEARCH INITIATED 13:12:40 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 2798 TO ITERATE

71.5% PROCESSED 2000 ITERATIONS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*

BATCH \*\*COMPLETE\*\*

PROJECTED ITERATIONS: 52788 TO 59132 PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> s 11 sss ful

FULL SEARCH INITIATED 13:12:49 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 56557 TO ITERATE

100.0% PROCESSED 56557 ITERATIONS

SEARCH TIME: 00.00.01

L3 38 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS SINCE FILE TOTAL

ENTRY SESSION

0 ANSWERS

38 ANSWERS

FULL ESTIMATED COST 172.31

FILE 'CAPLUS' ENTERED AT 13:12:56 ON 27 JUN 2007 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

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FILE COVERS 1907 - 27 Jun 2007 VOL 147 ISS 1 FILE LAST UPDATED: 26 Jun 2007 (20070626/ED)

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http://www.cas.org/infopolicy.html

=> s 13 L4 15 L3

=> d 14 1-15 bib hitstr

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L4
      ANSWER 1 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN
      2007:538392 CAPLUS
ΑN
      146:521779
DN
      Preparation of aza-substituted spiro derivatives as histamine H3 receptor
ΤI
      antagonists or reverse agonists
IN
      Jitsuoka, Makoto; Tsukahara, Daisuke; Sato, Nagaaki
PA
      Banyu Pharmaceutical Co., Ltd., Japan
      PCT Int. Appl., 129pp.
SO
      CODEN: PIXXD2
DT
      Patent
      Japanese
LA
FAN.CNT 1
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      PATENT NO.
                               KIND
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                                         20070518
                                                       WO 2006-JP322911
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RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, IS, MW, MZ, NA, SD, SI, SZ, TZ, UG, ZM, ZW, AM, AZ, BY
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ΙT
      936626-57-2P 936626-62-9P 936626-63-0P
      936626-64-1P 936626-66-3P 936626-68-5P
      936626-70-9P 936626-76-5P
      RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
      (Reactant or reagent)
          (intermediate; preparation of aza-substituted spiro derivs. as histamine H3
          receptor antagonists or reverse agonists)
RN
      328233-18-7 CAPLUS
CN
      Spiro[cyclohexane-1,1'(3'H)-furo[3,4-c]pyridine]-4-carboxylic acid,
      3'-oxo-, (1\alpha, 4\beta)- (CA INDEX NAME)
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RN 936626-55-0 CAPLUS Spiro[cyclohexane-1,5'(7'H)-furo[3,4-b]pyridine]-4-carboxylic acid, CN 2'-chloro-7'-oxo-,  $(1\alpha, 4\beta)$ - (CA INDEX NAME)

RN 936626-56-1 CAPLUS

CN Spiro[cyclohexane-1,5'(7'H)-furo[3,4-b]pyridine]-4-carboxylic acid, 2'-chloro-7'-oxo-, methyl ester,  $(1\alpha,4\beta)$ - (CA INDEX NAME)

Relative stereochemistry.

RN 936626-57-2 CAPLUS

CN Spiro[cyclohexane-1,3'(1'H)-furo[3,4-c]pyridine]-4-carboxylic acid, 6'-fluoro-1'-oxo- (CA INDEX NAME)

RN 936626-62-9 CAPLUS

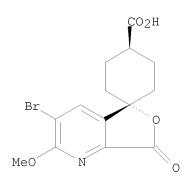
CN Spiro[cyclohexane-1,1'(3'H)-furo[3,4-c]pyridine]-4-carboxylic acid, 4'-chloro-3'-oxo-,  $(1\alpha,4\beta)$ - (CA INDEX NAME)

10/531,361

RN 936626-63-0 CAPLUS

CN Spiro[cyclohexane-1,5'(7'H)-furo[3,4-b]pyridine]-4-carboxylic acid, 3'-bromo-2'-methoxy-7'-oxo-,  $(1\alpha,4\beta)$ - (CA INDEX NAME)

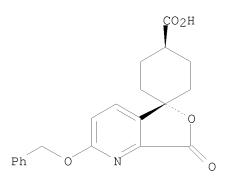
Relative stereochemistry.



RN 936626-64-1 CAPLUS

CN Spiro[cyclohexane-1,5'(7'H)-furo[3,4-b]pyridine]-4-carboxylic acid, 7'-oxo-2'-(phenylmethoxy)-,  $(1\alpha,4\beta)-$  (CA INDEX NAME)

Relative stereochemistry.



RN 936626-66-3 CAPLUS

CN Spiro[cyclohexane-1,5'(7'H)-furo[3,4-b]pyridine]-4-carboxylic acid, 7'-oxo-2'-(phenylmethoxy)-, methyl ester,  $(1\alpha,4\beta)$ - (CA INDEX NAME)

 ${\tt Relative \ stereochemistry.}$ 

RN 936626-68-5 CAPLUS

CN Spiro[cyclohexane-1,5'(1'H)-furo[3,4-b]pyridine]-4-carboxylic acid, 2',7'-dihydro-2',7'-dioxo-, methyl ester,  $(1\alpha,4\beta)$ - (CA INDEX NAME)

Relative stereochemistry.

RN 936626-70-9 CAPLUS

CN Spiro[cyclohexane-1,5'(7'H)-furo[3,4-b]pyridine]-4-carboxylic acid, 3'-bromo-2'-methoxy-7'-oxo-, methyl ester,  $(1\alpha,4\beta)$ - (CA INDEX NAME)

Relative stereochemistry.

RN 936626-76-5 CAPLUS

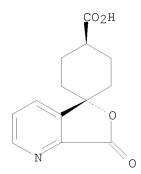
CN Spiro[cyclohexane-1,5'(1'H)-furo[3,4-b]pyridine]-4-carboxylic acid,

3'-bromo-2',7'-dihydro-2',7'-dioxo-, methyl ester, (1 $\alpha$ ,4 $\beta$ )- (CA INDEX NAME)

Relative stereochemistry.

CN Spiro[cyclohexane-1,5'(7'H)-furo[3,4-b]pyridine]-4-carboxylic acid, 7'-oxo-,  $(1\alpha,4\beta)$ - (CA INDEX NAME)

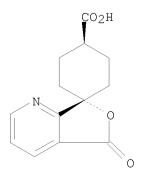
Relative stereochemistry.



RN 328233-23-4 CAPLUS CN Spiro[cyclohexane-1,3'(1'H)-furo[3,4-c]pyridine]-4-carboxylic acid, 1'-oxo-,  $(1\alpha,4\beta)$ - (CA INDEX NAME)

RN 328233-37-0 CAPLUS CN Spiro[cyclohexane-1,7'(5'H)-furo[3,4-b]pyridine]-4-carboxylic acid, 5'-oxo-, (1 $\alpha$ ,4 $\beta$ )- (CA INDEX NAME)

Relative stereochemistry.



RE.CNT 66 THERE ARE 66 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L4
      ANSWER 2 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN
      2007:144107 CAPLUS
ΑN
DN
      146:229335
      Preparation and crystalline structure study of trans-N-[1-(2-fluorophenyl)-
ΤI
      3-pyrazolyl]-3-oxospiro[6-azaisobenzofuran-1(3H),1'-cyclohexane]-4'-
      carboxamide as NPY5 antagonist
ΙN
      Ferlita, Russell R.; Haga, Yuji; Ishikawa, Makoto; Kamei, Keisuke; Kato,
      Shinji; Kojima, Hisaki; Moment, Aaron; Nonoyama, Nobuaki; Satake, Nobuya;
      Shigemori, Kazuki; Wada, Toshihiro; Wang, Yaling; Weissman, Steven A.;
      Wenslow, Robert M.
      Merck & Co., Inc., USA; Banyu Pharmaceutical Co., Ltd.
PA
SO
      PCT Int. Appl., 26pp.
      CODEN: PIXXD2
DT
      Patent
      English
LA
FAN.CNT 1
                                                    APPLICATION NO.
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                             KIND
                                      DATE
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PΙ
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      WO 2007016028
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PRAI US 2005-703088P
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                                      20050728
OS
      CASREACT 146:229335
ΙT
      328233-23-4
      RL: RCT (Reactant); RACT (Reactant or reagent)
          (preparation and crystalline structure study of
trans-N-[1-(2-fluorophenyl)-3-
         pyrazolyl]-3-oxospiro[6-azaisobenzofuran-1(3H),1'-cyclohexane]-4'-
          carboxamide as NPY5 antagonist)
RN
      328233-23-4 CAPLUS
CN
      Spiro[cyclohexane-1,3'(1'H)-furo[3,4-c]pyridine]-4-carboxylic acid,
      1'-\inftyo-, (1\alpha, 4\beta) - (CA INDEX NAME)
```

- L4 ANSWER 3 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN
- AN 2006:875001 CAPLUS
- DN 146:461583
- TI Product class 14: alkyl- and cycloalkylketenes
- AU Tidwell, T. T.
- CS Department of Chemistry, University of Toronto, Toronto, ON, M5S 3H6, Can.
- SO Science of Synthesis (2006), 23, 569-678 CODEN: SSCYJ9
- PB Georg Thieme Verlag
- DT Journal; General Review
- LA English
- IT 870466-68-5P 870466-69-6P
  - RL: SPN (Synthetic preparation); PREP (Preparation) (review of preparation of alkyl- and cycloalkylketenes with applications to organic synthesis)
- RN 870466-68-5 CAPLUS
- CN Spiro[cyclohexane-1,3'(1'H)-furo[3,4-c]pyridine]-4-carboxylic acid, 1'-oxo-, 1,1-dimethylethyl ester,  $(1\alpha,4\beta)$  (CA INDEX NAME)

- RN 870466-69-6 CAPLUS
- CN Spiro[cyclohexane-1,3'(1'H)-furo[3,4-c]pyridine]-4-carboxylic acid, 1'-oxo-, 1,1-dimethylethyl ester,  $(1\alpha,4\alpha)$  (CA INDEX NAME)

## Relative stereochemistry.

RE.CNT 322 THERE ARE 322 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L4 ANSWER 4 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN
- AN 2006:843571 CAPLUS
- DN 146:404016
- TI Pharmaceutical industrial experiments on continuous cryogenic reactions using mini-sized multi-stage reactors
- AU Takasuga, Masahiro; Yabuki, Yasuaki; Kato, Yoshiaki
- CS Process R&D, Laboratories for Technology Development, Banyu Pharmaceutical Co., Ltd., 3-9-1, Kamimutsuna, Okazaki-shi, Aichi, 444-0858, Japan
- SO Journal of Chemical Engineering of Japan (2006), 39(7), 772-776 CODEN: JCEJAQ; ISSN: 0021-9592
- PB Society of Chemical Engineers, Japan
- DT Journal
- LA English
- IT 687640-99-9P 870466-64-1P
  - RL: IMF (Industrial manufacture); PREP (Preparation)
    (continuous cryogenic reaction using mini-sized multi-stage reactor for preparation of spirolactone ester intermediate for neuropeptide receptor synthesis)
- RN 687640-99-9 CAPLUS
- CN Spiro[cyclohexane-1,3'(1'H)-furo[3,4-c]pyridine]-4-carboxylic acid, 1'-oxo-, ethyl ester,  $(1\alpha, 4\beta)$  (CA INDEX NAME)

- RN 870466-64-1 CAPLUS
- CN Spiro[cyclohexane-1,3'(1'H)-furo[3,4-c]pyridine]-4-carboxylic acid, 1'-oxo-, ethyl ester,  $(1\alpha, 4\alpha)$  (CA INDEX NAME)

Relative stereochemistry.

RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L4
     ANSWER 5 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN
     2006:238601 CAPLUS
ΑN
DN
     144:311923
     Preparation of carbamoyl-substituted spiro compounds as histamine H3
ΤI
     antagonists or inverse agonists
     Jitsuoka, Makoto; Sato, Naqaaki; Tsukahara, Daisuke; Ohtake, Norikazu;
ΙN
     Tokita, Shigeru
     Banyu Pharmaceutical Co., Ltd., Japan
PA
     PCT Int. Appl., 230 pp.
SO
     CODEN: PIXXD2
DT
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LA
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FAN.CNT 1
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     879369-23-0P 879369-24-1P 879369-25-2P
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     preparation); THU (Therapeutic use); BIOL (Biological study); PREP
     (Preparation); RACT (Reactant or reagent); USES (Uses)
        (preparation of carbamoyl-substituted spiro compds. as histamine H3
        antagonists or inverse agonists)
     879369-18-3 CAPLUS
RN
     Spiro[cyclohexane-1,1'(3'H)-isobenzofuran]-4-carboxylic acid,
CN
     5'-(2-fluoroethoxy)-3'-oxo-, trans- (9CI) (CA INDEX NAME)
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RN 879369-19-4 CAPLUS

CN Spiro[cyclohexane-1,1'(3'H)-isobenzofuran]-4-carboxylic acid, 5'-methoxy-3'-oxo-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 879369-20-7 CAPLUS

CN Spiro[cyclohexane-1,1'(3'H)-isobenzofuran]-4-carboxylic acid, 5'-fluoro-3'-oxo-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 879369-23-0 CAPLUS

CN Spiro[cyclohexane-1,1'(3'H)-isobenzofuran]-4-carboxylic acid, 7'-methoxy-3'-oxo-, trans- (9CI) (CA INDEX NAME)

RN 879369-24-1 CAPLUS

CN Spiro[cyclohexane-1,1'(3'H)-isobenzofuran]-4-carboxylic acid, 6'-methoxy-3'-oxo-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 879369-25-2 CAPLUS

CN Spiro[cyclohexane-1,1'(3'H)-isobenzofuran]-4-carboxylic acid, 5'-hydroxy-3'-oxo-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

IT 879369-33-2P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of carbamoyl-substituted spiro compds. as histamine  ${\tt H3}$  antagonists or inverse agonists)

RN 879369-33-2 CAPLUS

CN Spiro[cyclohexane-1,1'(3'H)-isobenzofuran]-4-carboxylic acid,

5'-methoxy-4-methyl-3'-oxo-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

IT 328233-08-5P 879369-31-0P 879369-32-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of carbamoyl-substituted spiro compds. as histamine H3 antagonists or inverse agonists)

RN 328233-08-5 CAPLUS

CN Spiro[cyclohexane-1,1'(3'H)-isobenzofuran]-4-carboxylic acid, 3'-oxo-, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 879369-31-0 CAPLUS

CN Spiro[cyclohexane-1,1'(3'H)-isobenzofuran]-4-carboxylic acid, 5'-methoxy-3'-oxo-, methyl ester, trans- (9CI) (CA INDEX NAME)

RN 879369-32-1 CAPLUS

CN Spiro[cyclohexane-1,1'(3'H)-isobenzofuran]-4-carboxylic acid, 5'-methoxy-4-methyl-3'-oxo-, methyl ester, trans- (9CI) (CA INDEX NAME)

RE.CNT 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

- L4 ANSWER 6 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN
- AN 2005:1080539 CAPLUS
- DN 144:22849
- TI Practical Synthesis of a Neuropeptide Y Antagonist via Stereoselective Addition to a Ketene
- AU Iida, Takehiko; Satoh, Hiroki; Maeda, Kenji; Yamamoto, Yuhei; Asakawa, Ken-ichi; Sawada, Naotaka; Wada, Toshihiro; Kadowaki, Chie; Itoh, Takahiro; Mase, Toshiaki; Weissman, Steven A.; Tschaen, Dave; Krska, Shane; Volante, R. P.
- CS Process Research Process RD Laboratories for Technology Development, Banyu Pharmaceutical Co. Ltd., Aichi, 444-0858, Japan
- SO Journal of Organic Chemistry (2005), 70(23), 9222-9229 CODEN: JOCEAH; ISSN: 0022-3263
- PB American Chemical Society
- DT Journal
- LA English
- OS CASREACT 144:22849
- IT 687640-99-9P
  - RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (crystal structure; practical synthesis of N-[(fluorophenyl)pyrazolyl] spiro[cyclohexane-furopyridinone]carboxamide via stereoselective addition of alcs. to ketene)
- RN 687640-99-9 CAPLUS
- CN Spiro[cyclohexane-1,3'(1'H)-furo[3,4-c]pyridine]-4-carboxylic acid, 1'-oxo-, ethyl ester,  $(1\alpha, 4\beta)$  (CA INDEX NAME)

IT 328233-23-4P

RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (practical synthesis of N-[(fluorophenyl)pyrazolyl] spiro[cyclohexane-furopyridinone]carboxamide via stereoselective addition of alcs. to ketene)

RN 328233-23-4 CAPLUS

CN Spiro[cyclohexane-1,3'(1'H)-furo[3,4-c]pyridine]-4-carboxylic acid, 1'-oxo-,  $(1\alpha,4\beta)$ - (CA INDEX NAME)

IT 807320-43-0P 870466-68-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(practical synthesis of N-[(fluorophenyl)pyrazolyl]

spiro[cyclohexane-furopyridinone]carboxamide via stereoselective addition
of alcs. to ketene)

of alcs. to ketene)  $\rm RN = 807320{-}43{-}0 \ CAPLUS$ 

CN Spiro[cyclohexane-1,3'(1'H)-furo[3,4-c]pyridine]-4-carboxylic acid, 1'-oxo-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

RN 870466-68-5 CAPLUS

CN Spiro[cyclohexane-1,3'(1'H)-furo[3,4-c]pyridine]-4-carboxylic acid, 1'-oxo-, 1,1-dimethylethyl ester,  $(1\alpha,4\beta)$ - (CA INDEX NAME)

RL: SPN (Synthetic preparation); PREP (Preparation)
 (practical synthesis of N-[(fluorophenyl)pyrazolyl]
 spiro[cyclohexane-furopyridinone]carboxamide via stereoselective addition
 of alcs. to ketene)
 RN 870466-64-1 CAPLUS
 CN Spiro[cyclohexane-1,3'(1'H)-furo[3,4-c]pyridine]-4-carboxylic acid,
 1'-oxo-, ethyl ester, (1α,4α)- (CA INDEX NAME)

Relative stereochemistry.

RN 870466-69-6 CAPLUS Spiro[cyclohexane-1,3'(1'H)-furo[3,4-c]pyridine]-4-carboxylic acid, 1'-oxo-, 1,1-dimethylethyl ester,  $(1\alpha,4\alpha)$ - (CA INDEX NAME)

Relative stereochemistry.

RN 870466-71-0 CAPLUS
CN Spiro[cyclohexane-1,3'(1'H)-furo[3,4-c]pyridine]-4-carboxylic acid,
1'-oxo-, 1,1-dimethylpropyl ester, trans- (9CI) (CA INDEX NAME)

RE.CNT 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4

```
ANSWER 7 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN
      2005:123194 CAPLUS
ΑN
     142:219265
DN
      Preparation of novel spiro compounds as neuropeptide Y antagonists
TI
IN
      Fukami, Takehiro; Kanatani, Akio; Ishihara, Akane; Ishii, Yasuyuki;
      Takahashi, Toshiyuki; Haqa, Yuji; Sakamoto, Toshihiro; Itoh, Takahiro;
      Chiba, Masato
PA
      U.S. Pat. Appl. Publ., 32 pp., Cont.-in-part of Appl. No. PCT/JP03/02611.
SO
      CODEN: USXXCO
DT
      Patent
LA
      English
FAN.CNT 3
                                                    APPLICATION NO.
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                             KIND
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                                                                                DATE
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      US 2005032820
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                                                    US 2004-922869
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РΤ
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      US 2002188124
                                      20021212
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                              Α1
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      US 6803372
                              В2
                                      20041012
      WO 2003076443
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                                                                                20030305
      WO 2003076443
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          SC, SG, TJ, TM, TN, TT, UA, US, UZ, VC, VN, YU, ZA

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
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                              A2
PRAI US 2002-92549
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      WO 2003-JP2611
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      JP 1999-233573
                                      19990820
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      JP 2000-137692
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      US 2000-640784
                              А3
                                      20000818
      US 2001-983598
                              Α2
                                      20011025
      CASREACT 142:219265; MARPAT 142:219265
OS
      478014-39-0P
ΙΤ
      RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
      (Reactant or reagent)
         (intermediate; preparation of novel spiro compds. as neuropeptide Y
         antagonists for treating cardiovascular disorders, central nervous
         system disorders, and metabolic diseases, etc.)
RN
      478014-39-0 CAPLUS
      Spiro[cyclohexane-1,3'(1'H)-furo[3,4-c]pyridine]-4-carboxylic acid,
CN
      4-hydroxy-1'-oxo-, cis- (9CI) (CA INDEX NAME)
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IT 328233-23-4 RL: RCT (Reactant); RACT (Reactant or reagent) (reactant; preparation of novel spiro compds. as neuropeptide Y antagonists for treating cardiovascular disorders, central nervous system disorders, and metabolic diseases, etc.) RN 328233-23-4 CAPLUS CN Spiro[cyclohexane-1,3'(1'H)-furo[3,4-c]pyridine]-4-carboxylic acid, 1'-oxo-,  $(1\alpha,4\beta)$ - (CA INDEX NAME)

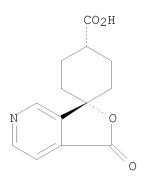
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L4
      ANSWER 8 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN
      2004:1037108 CAPLUS
ΑN
      142:23196
DN
      A preparation of spirolactone derivatives, useful as NPY5 antagonists
ΤI
ΙN
      Volante, Ralph P.; Weissman, Steven A.; Iida, Takehiko; Yamamoto, Yuhei;
      Sato, Hiroki; Maeda, Kenji; Sawada, Naotaka; Mase, Toshiaki
PA
      Merck & Co., Inc., USA; Banyu Pharmaceutical Co., Ltd.
      PCT Int. Appl., 47 pp.
SO
      CODEN: PIXXD2
DT
      Patent
      English
LA
FAN.CNT 1
      PATENT NO.
                             KIND
                                                    APPLICATION NO.
                                       DATE
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      WO 2004104009
                                       20041202
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РΤ
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                GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
                LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI,
          RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, NA, NE, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE,
                SN, TD, TG
      AU 2004240933
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                               Α1
                                       20041202
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                                                                                  20040514
      CN 1894256
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                                                                                  20040514
      US 2006241299
                                       20061026
                                                     US 2005-550136
                                                                                  20050921
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PRAI US 2003-471680P
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      WO 2004-US15051
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      CASREACT 142:23196; MARPAT 142:23196
OS
ΙT
      569351-62-8P
      RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic
      preparation); PREP (Preparation); RACT (Reactant or reagent)
          (preparation of spirolactone derivs. useful as NPY5 antagonists)
RN
      569351-62-8 CAPLUS
CN
      Spiro[cyclohexane-1,3'(1'H)-furo[3,4-c]pyridine]-4-carboxylic acid,
      1'-oxo- (9CI) (CA INDEX NAME)
        CO2H
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CN Spiro[cyclohexane-1,3'(1'H)-furo[3,4-c]pyridine]-4-carboxylic acid, 1'-oxo-, (1 $\alpha$ ,4 $\beta$ )- (CA INDEX NAME)

RN 799773-96-9 CAPLUS

CN Spiro[cyclohexane-1,3'(1'H)-furo[3,4-c]pyridine]-4-carboxylic acid, 1'-oxo-, hydrochloride, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.



● HCl

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
L4
      ANSWER 9 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN
      2004:493699 CAPLUS
ΑN
      141:38615
DN
      Preparation of isobenzofuran moiety-containing azoles and related
ΤI
      compounds as NPY receptor antagonists for the treatment of hyperphagia,
      obesity and diabetes
ΙN
      Otake, Norikazu; Haqa, Yuji; Jitsuoka, Makoto; Kanatani, Akio
      Banyu Pharmaceutical Co., Ltd., Japan
PA
      PCT Int. Appl., 157 pp.
SO
      CODEN: PIXXD2
DT
      Patent
LA
      Japanese
FAN.CNT 1
                                        DATE
      PATENT NO.
                               KIND
                                                       APPLICATION NO.
                                                                                      DATE
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                                        20040617 WO 2003-JP15018
      WO 2004050652
                               A1
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РΤ
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RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GO, GW, ML, MR, NE, SN, TD
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      CA 2507742
                                     20040617 CA 2003-2507742 20031125
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      AU 2003302640
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                                         20040623
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                                                                                      20031125
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                                Α1
                                         20050824
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      US 2006111380
                                                     US 2005-536360 20050909
                               A1 20060525
PRAI JP 2002-346997
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                                         20021129
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OS
      MARPAT 141:38615
      328233-08-5 328233-23-4
ΙT
      RL: RCT (Reactant); RACT (Reactant or reagent)
          (preparation of isobenzofurans and related compds. as NPY receptor
          antagonists)
RN
      328233-08-5 CAPLUS
CN
      Spiro[cyclohexane-1,1'(3'H)-isobenzofuran]-4-carboxylic acid, 3'-oxo-,
      trans- (9CI) (CA INDEX NAME)
```

328233-23-4 CAPLUS RN CN Spiro[cyclohexane-1,3'(1'H)-furo[3,4-c]pyridine]-4-carboxylic acid,

1'-oxo-, 
$$(1\alpha, 4\beta)$$
- (CA INDEX NAME)

IT 701917-07-9P

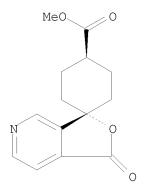
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of isobenzofurans and related compds. as NPY receptor antagonists)

RN 701917-07-9 CAPLUS

CN Spiro[cyclohexane-1,3'(1'H)-furo[3,4-c]pyridine]-4-carboxylic acid, 1'-oxo-, methyl ester, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.



RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

```
ANSWER 10 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN
L4
ΑN
     2004:368865 CAPLUS
DN
     140:391268
     Preparation of (hetero)aryl-fused spirolactones from
ΤI
     (hetero)arylcarboxamides and cyclohexanones.
ΙN
     Volante, Ralph P.; Tschaen, David M.; Weissman, Steven A.; Heileman,
     Matthew; Mase, Toshiaki; Iida, Takehiko; Maeda, Kenji; Wada, Toshihiro;
     Sato, Hiroki; Asakawa, Kenichi
     Merck & Co., Inc., USA; Banyu Pharmaceutical Co., Ltd.
PA
     PCT Int. Appl., 64 pp.
SO
     CODEN: PIXXD2
DT
     Patent
     English
LA
FAN.CNT 1
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                                                 APPLICATION NO.
                                    DATE
     PATENT NO.
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          PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
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PRAI US 2002-419464P
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     WO 2003-US32393 W
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OS
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ΤТ
     569351-62-8P
     RL: IMF (Industrial manufacture); PUR (Purification or recovery); SPN
      (Synthetic preparation); PREP (Preparation)
         (preparation of (hetero)aryl-fused spirolactones from arylcarboxamides and
         cyclohexanones)
RN
     569351-62-8 CAPLUS
     Spiro[cyclohexane-1,3'(1'H)-furo[3,4-c]pyridine]-4-carboxylic acid,
CN
     1'-oxo- (9CI) (CA INDEX NAME)
```

10/531,361

IT 687641-00-5P

RL: IMF (Industrial manufacture); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation of (hetero)aryl-fused spirolactones from arylcarboxamides and

cyclohexanones) RN 687641-00-5 CAPLUS

CN Spiro[cyclohexane-1,3'(1'H)-furo[3,4-c]pyridine]-4-carboxylic acid, 1'-oxo-, ethyl ester, trans-, (1S,4R)-7,7-dimethyl-2-oxobicyclo[2.2.1]heptane-1-methanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 687640-99-9 CMF C15 H17 N O4

Relative stereochemistry.

CM 2

CRN 3144-16-9 CMF C10 H16 O4 S

Absolute stereochemistry. Rotation (+).

IT 687640-97-7P

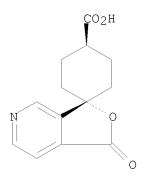
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(preparation of (hetero)aryl-fused spirolactones from arylcarboxamides and cyclohexanones)

RN 687640-97-7 CAPLUS

CN Spiro[cyclohexane-1,3'(1'H)-furo[3,4-c]pyridine]-4-carboxylic acid, 1'-oxo-, hydrochloride, trans- (9CI) (CA INDEX NAME)

Relative stereochemistry.



## ● HCl

IT 687640-98-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of (hetero)aryl-fused spirolactones from arylcarboxamides and cyclohexanones)

RN 687640-98-8 CAPLUS

CN Spiro[cyclohexane-1,3'(1'H)-furo[3,4-c]pyridine]-4-carboxylic acid, 1'-oxo-, ethyl ester (9CI) (CA INDEX NAME)

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ANSWER 11 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN
L4
ΑN
     2004:20686 CAPLUS
DN
     140:77152
     Preparation of novel benzimidazole derivatives as neuropeptide Y receptor
ΤI
     antagonists
IN
     Otake, Norikazu; Moriya, Minoru; Ogino, Yoshio; Matsuda, Kenji; Nagae,
     Yoshikazu; Kanatani, Akio; Fukami, Takehiro
     Banyu Pharmaceutical Co., Ltd., Japan
PA
     PCT Int. Appl., 171 pp.
     CODEN: PIXXD2
DT
     Patent
LA
     English
FAN.CNT 1
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                                                                          DATE
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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
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ΙT
     RL: RCT (Reactant); RACT (Reactant or reagent)
         (preparation of benzimidazole derivs. as neuropeptide Y receptor
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RN
     328233-08-5 CAPLUS
CN
     Spiro[cyclohexane-1,1'(3'H)-isobenzofuran]-4-carboxylic acid, 3'-oxo-,
     trans- (9CI) (CA INDEX NAME)
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RN 328233-23-4 CAPLUS CN Spiro[cyclohexane-1,3'(1'H)-furo[3,4-c]pyridine]-4-carboxylic acid, 1'-oxo-, (1 $\alpha$ ,4 $\beta$ )- (CA INDEX NAME)

L4 ANSWER 12 OF 15 CAPLUS COPYRIGHT 2007 ACS on STN

AN 2003:590876 CAPLUS

DN 139:133553

TI Stereoselective process for making spirolactone compounds

IN Maeda, Kenji; Kato, Shinji; Iida, Takehiko; Tschaen, David M.

PA Banyu Pharmaceutical Co., Ltd., Japan

SO U.S. Pat. Appl. Publ., 5 pp. CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

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	(stereoselective process for making spirolactone compds.)													

RN 328233-23-4 CAPLUS

CN Spiro[cyclohexane-1,3'(1'H)-furo[3,4-c]pyridine]-4-carboxylic acid, 1'-oxo-,  $(1\alpha,4\beta)$ - (CA INDEX NAME)

Relative stereochemistry.

RN 569351-62-8 CAPLUS

CN Spiro[cyclohexane-1,3'(1'H)-furo[3,4-c]pyridine]-4-carboxylic acid, 1'-oxo- (9CI) (CA INDEX NAME)

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     138:170086
     Preparation of spiro[isoquinoline-piperidine], spiro[indoline-piperidine],
ΤI
     and spirocyclohexane compounds as antagonists of neuropeptide Y receptor
IN
     Fukami, Takehiro; Nonoshita, Katsumasa; Sagara, Takeshi; Kishino, Hiroyuki
PA
     Banyu Pharmaceutical Co., Ltd., Japan
     PCT Int. Appl., 220 pp.
SO
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     Japanese
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ΤТ
     328233-08-5
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (preparation of spiro[isoquinoline-piperidine], spiro[indoline-piperidine],
        and spiro[azaisobenzofuran-cyclohexane], and spirocyclohexane compds.
        as antagonists of neuropeptide Y receptor for treating overeating,
        obesity, and diabetes)
     328233-08-5 CAPLUS
RN
CN
     Spiro[cyclohexane-1,1'(3'H)-isobenzofuran]-4-carboxylic acid, 3'-oxo-,
     trans- (9CI) (CA INDEX NAME)
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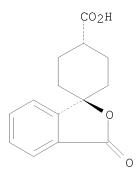
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      138:24705
      Preparation of spiroisoindolinepiperidinecarboxamides,
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      spirocyclohexaneisobenzofurancarboxamides, spiroazaisobenzofurancyclohexan
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ΙN
      Fukami, Takehiro; Kanatani, Akio; Ishihara, Akane; Ishii, Yasuyuki;
      Takahashi, Toshiyuki; Haga, Yuji; Sakamoto, Toshihiro; Itoh, Takahiro
      Banyu Pharmaceutical Co., Ltd., Japan
PA
      U.S. Pat. Appl. Publ., 53 pp., Cont.-in-part of U.S. Pat. Appl. 2002
SO
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                FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
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     US 2003220499 A1
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US 2000-640784 A3
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328233-08-5P 328233-13-2P 328233-18-7P

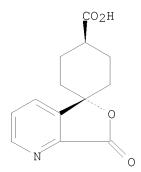
ΙT

Relative stereochemistry.



RN 328233-13-2 CAPLUS CN Spiro[cyclohexane-1,5'(7'H)-furo[3,4-b]pyridine]-4-carboxylic acid, 7'-oxo-,  $(1\alpha,4\beta)$ - (CA INDEX NAME)

Relative stereochemistry.

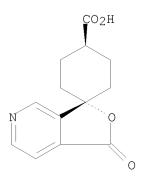


RN 328233-18-7 CAPLUS CN Spiro[cyclohexane-1,1'(3'H)-furo[3,4-c]pyridine]-4-carboxylic acid, 3'-oxo-,  $(1\alpha,4\beta)$ - (CA INDEX NAME)

10/531,361

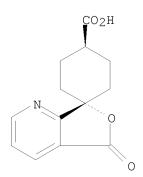
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Relative stereochemistry.



RN 328233-37-0 CAPLUS CN Spiro[cyclohexane-1,7'(5'H)-furo[3,4-b]pyridine]-4-carboxylic acid, 5'-oxo-,  $(1\alpha,4\beta)$ - (CA INDEX NAME)

Relative stereochemistry.



RN 478014-39-0 CAPLUS
CN Spiro[cyclohexane-1,3'(1'H)-furo[3,4-c]pyridine]-4-carboxylic acid,
4-hydroxy-1'-oxo-, cis- (9CI) (CA INDEX NAME)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

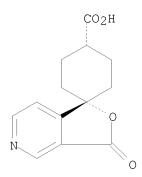
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    Preparation of spiroisoindolinepiperidines, spiroisoquinolinepiperidines,
TΙ
     spiroisobenzofuranpiperidines, and related compounds as neuropeptide Y
     antagonists.
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- Fukami, Takehiro; Kanatani, Akio; Ishihara, Akane; Ishii, Yasuyuki; ΙN Takahashi, Toshiyuki; Haga, Yuji; Sakamoto, Toshihiro; Itoh, Takahiro
- Banyu Pharmaceutical Co., Ltd., Japan PΑ
- SO PCT Int. Appl., 164 pp. CODEN: PIXXD2
- DT Patent

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US 2002-226225 А3 20020823 OS MARPAT 134:207809 328233-46-1 ΤT RL: RCT (Reactant); RACT (Reactant or reagent) (preparation of spiroisoindolinepiperidines, spiroisoquinolinepiperidines, spiroisobenzofuranpiperidines, and related compds. as neuropeptide Y antagonists) RN 328233-46-1 CAPLUS Spiro[cyclohexane-1,1'(3'H)-furo[3,4-c]pyridine]-4-carboxylic acid, CN 3'-oxo-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.



IT 328233-08-5P 328233-13-2P 328233-18-7P
 328233-23-4P 328233-37-0P
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
 (Reactant or reagent)
 (preparation of spiroisoindolinepiperidines, spiroisoquinolinepiperidines,
 spiroisobenzofuranpiperidines, and related compds. as neuropeptide Y
 antagonists)
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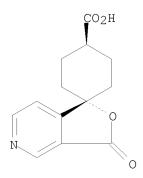
Relative stereochemistry.

RN 328233-13-2 CAPLUS CN Spiro[cyclohexane-1,5'(7'H)-furo[3,4-b]pyridine]-4-carboxylic acid, 7'-oxo-, (1 $\alpha$ ,4 $\beta$ )- (CA INDEX NAME)

10/531,361

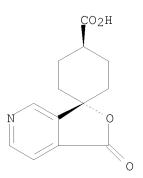
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Relative stereochemistry.



RN 328233-23-4 CAPLUS CN Spiro[cyclohexane-1,3'(1'H)-furo[3,4-c]pyridine]-4-carboxylic acid, 1'-oxo-, (1 $\alpha$ ,4 $\beta$ )- (CA INDEX NAME)

Relative stereochemistry.



RN 328233-37-0 CAPLUS CN Spiro[cyclohexane-1,7'(5'H)-furo[3,4-b]pyridine]-4-carboxylic acid, 5'-oxo-,  $(1\alpha,4\beta)$ - (CA INDEX NAME)

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

10/531,361

=> log y COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 54.77 227.08

FULL ESTIMATED COST

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